

AMENDMENTS TO THE CLAIMS

Listing of Claims

The following listing of claims replaces all previous listings or versions thereof:

1. (Currently amended) A method for detecting endotoxin, comprising the steps:
 - a) incubating a sample with an isolated p12 or p12-similar bacteriophage tail protein, and
 - b) detecting endotoxin bonded to said bacteriophage tail ~~proteins~~protein.
2. (Currently amended) The method according to claim 1, further comprising after step a) and prior to step b) the additional step of:
 - a') separating a bacteriophage tail protein-endotoxin ~~complexes~~complex from the sample.
3. (Previously presented) The method according to claim 1, wherein detection comprises spectroscopic methods.
4. (Currently amended) A method for removing endotoxin from a sample, comprising the steps:
 - a) incubating a sample with or bringing a sample in contact with an isolated p12 or p12-similar bacteriophage tail ~~proteins~~protein which ~~are~~is immobilised on a permanent carrier, non-specifically or directed, in the presence of bivalent ions,
 - b) separating bacteriophage tail protein-endotoxin complex from the sample

wherein the permanent carrier comprises filtration media, glass particles, magnetic particles, agarose particles, sedimentation materials or filling materials for chromatography columns.
5. (Previously presented) The method according to claim 4, wherein steps a) and b) are implemented in a chromatography column throughflow method.

6. (Canceled)
7. (Previously presented) The method according to claim 4, the bacteriophage tail proteins being immobilised on the permanent carrier via coupling groups.
8. (Previously presented) The method according to claim 7, the coupling group being a lectin, receptor or anticalin.
9. (Previously presented) The method according to claim 7, wherein the coupling group comprises streptavidin or avidin and the bacteriophage tail proteins are coupled with biotin or a Strep-tag.
10. (Previously presented) The method according to claim 4, the bacteriophage tail proteins are immobilised on the permanent carrier covalently via chemical bonds.
11. (Previously presented) The method according to claim 1, wherein the bacteriophage tail protein comprises a Strep-tag or a His-tag.
12. (Currently amended) The method according to claim ~~[[11]]~~1, wherein the tag comprises an amino acid sequence according to SEQ ID NO. 5, 6 or 7.
13. (Currently amended) The method according claim ~~[[11]]~~1, wherein the bacteriophage tail protein is p12 protein of the phage T4 is used as bacteriophage tail protein and comprises a Strep-tag or a His-tag.
14. (Currently amended) The method according to claim 1, wherein the bivalent cations are ~~Ca²⁺ concentration of the incubation comprises 0.1 μM to 10 mM and the~~ or ~~Mg²⁺ concentration comprises~~ in the range of 0.1 μM to 10 mM.
15. (Currently amended) The method according to claim 1, wherein detecting comprises detecting fluorescence-marked endotoxin being displaced from the bond with the said bacteriophage tail protein and the marked endotoxin being subsequently detected protein of step a).

16. (Currently amended) The method according to claim ~~[[1]]~~4, wherein the bacteriophage tail protein comprises a Strep-tag or a His-tag.
17. (Currently amended) The method according to claim ~~[[16]]~~4, wherein the tag comprises an amino acid sequence according to SEQ ID NO. 5, 6 or 7.
18. (Currently amended) The method according claim ~~[[16]]~~4, wherein the bacteriophage tail protein is p12 protein of the phage T4 being used as bacteriophage tail protein and comprises a Strep-tag or His-tag.